

Serial No. 10/507,177
Amendment Dated: February 3, 2009
Reply to Office Action Mailed: November 3, 2008
Attorney Docket No. 101709.55374US

Amendments to the Drawings:

The attached sheet of drawings includes changes to Figures 1-3.

Attachment: Replacement Sheet

REMARKS

Applicant's acknowledge the allowance of claims 26-33 and 35, as set forth in item 8 on page 5 of the Office Action. In this regard, Applicant's note that claims 29 and 31 have been rewritten in dependent form in order to reduce the number of independent claims. However, both of claims 29 and 31 now depend, directly or indirectly, on allowed claim 26, and should therefore remain allowable for that reason. Moreover, the substantive content of both claims 29 and 31 remains exactly the same as those claims as they existed previously in independent form.

The drawings have been objected to under 37 CFR § 1.83(a) on the ground that they fail to show every feature of the invention specified in the claims. In particular, item 2 of the Office Action refers to the reflective, absorptive and curved panels referred to in the claims. In response to this ground of rejection, Applicant's have submitted hereinwith a replacement sheet containing Figures 1-3, in which the panels 4, 4A in Figure 2 are shown in a curved configuration. Support for this revision is found not only in claims 16 and 23 as originally submitted, but also in the Specification at page 5, lines 12-14. In addition, Figure 2, also includes a designation 4A for the absorptive panel, and a corresponding reference numeral has been inserted at page 5, line 4 as well. Finally, Applicant's note that the absorptive and reflective qualities of the

respective panels are indicated by the directions of the arrows in Figure 2, with the arrow associated with Figure 4A indicating an absorptive characteristic, while the remaining arrows indicate reflection. A corresponding reference to the arrows has been inserted in the Specification at page 5, line. Accordingly, reconsideration and withdrawal of this ground of objection are respectively requested.

Claims 11-15, 17, 22, 24, 25 and 36-39 have been rejected under 35 USC § 1.02(b) as anticipated by Stafford (International patent document WO 01/09562). However, for the reasons set forth hereinafter, Applicant's respectfully submit that all claims which remain of record herein distinguish over the Stafford reference.

As a preliminary matter, Applicant's note that a lack of clarity may have been introduced by the Amendment dated August 4, 2008, in which claim 11 was limited to a configuration where "the array is positioned at a location that is separated at a distance from said at least one object." On the other hand, claim 12 (which depends from claim 11) recited that "the array of panels is attached to an outer surface of each object." However, it is clear from the Specification, that these two arrangements are in fact alternative embodiments. Thus, for example, at page 2, line 16 and 17, the Specification provides that, "the apparatus may be attached to an outer surface of each object or may be placed distant from each

object.” The insertion of the limitation in the last three lines of claim 11 was intended to be directed to the latter embodiment which, according to the Specification, “may be placed distant from each object” as can be seen, for example, in Figures 1 and 2. By the foregoing amendment, claim 12 has been cancelled. Claims 23, as amended, and 31 are directed to the embodiment in which the array of panels is attached to an outer surface of the object.

The Stafford reference discloses an arrangement in which an array of panels is attached to an object. Claim 11, however, has been limited in a manner which excludes such an arrangement, which could not be used under the circumstances envisioned by the present invention. Particular examples are given in the Applicant’s Specification and the description relating to Figure 1, at page 3, line 30 through page 4, line 3, where it is provided that,

“This embodiment of the present invention is suitable for objects requiring opening, for example buildings with windows and doors, or for objects where the surface of the structure is an essential part of the structure function, such as a wind turbine.”

Clearly it would be impossible in practice to attach a structure as described and shown in Stafford to the rotors of a wind turbine. Accordingly, Applicant’s claim

11, as well as dependent claims 13-15, 17, 19, 25 and 40 distinguish over Stafford on this basis.

Claim 36 is a method claim which includes a step of providing an array of at least one substantially reflective panel which is situated between the object and at least one receiver "at a location that is separated at a distance from said at least one object." In addition, claim 37 has been amended to include a similar limitation. Accordingly, Applicant's respectfully submit that claims 36-39 are allowable for the reasons discussed above.

Claims 16, 23 and 34 have been rejected under 35 CFR § 103(a) as unpatentable over Stafford in view of Fischer (US Patent 5,488,372). In particular, the Office Action indicates that the difference between the Stafford and claim 16, 23 and 34 resides in the recitation of curved panels, a feature which, however, is said to be known to the art, as exemplified by Fischer. Applicant's note in the regard, however, that claim 16 has been amended to recite that the panels have a "generally curved configuration which supports dispersion of said incident electromagnet radiation."

The apparatus disclosed in both Stafford and Fischer is intended for use in different circumstances from that of the present invention. That is, both are for use where it is intended that a mobile object avoids detection from an unknown

receiver in an unpredictable direction. The present invention, on the other hand, is generally for use in protecting a receiver in unknown location from reflections from a fixed object in an known location. That is, the purpose of present invention is to protect a receiver, rather than to "hide" an object. Simply dispersing the radiation from an object in context of Stafford and Fischer will not provide any advantage, since it may not reduce the amount of radiation sent in the unpredictable direction of the unwanted receiver. Dispersing the radiation away from the known location of the receiver in the context of the present invention, however, is extremely useful: It makes no difference that radiation is transmitted away from the object, but rather only that it be transmitted to a receiver in a particular spot.

The Fischer patent at column 2 states that the curved surfaces are provided for the purpose of reducing radar footprints, but clearly excludes a convex "curved configuration which supports dispersion of said incident electromagnetic radiation." The Office Action at page 4 indicates that the Fischer references teaches that it is well known in the art to use curved panels, referring in particular to Figures 1-6 and 11, as well as column 2, lines 1-26. However, each of the referenced figures shows a concave surface in keeping with the purpose of reducing radar footprints as described above. Such concave

surfaces do not have a "curved configuration which supports dispersion of said incident electromagnetic radiation."


Moreover, at column 1, describing the prior art, the Fischer patent refers to the shape of an aircraft itself, not to an array to be placed between an object and a receiver. In particular, it refers to always presenting "an edge, (leading edge or wing tip), toward the detection device." Therefore, according to Fischer there had been earlier efforts to reduce convexity in the profile in parts of airplanes, these being referred to at column 1, lines 38-44. But there is no reference to anything resembling an array according to the invention in which the panels have a curved configuration which supports dispersion of incident electromagnetic radiation. Rather, the convexity in the context of the prior art discussed in Fischer is present as a feature of normal airfoil design, and the teachings seems to have been directed to reducing it to the greatest extent possible. As noted at column 2, lines 52-58, in Fischer, "The basic concept differs from the prior art in that all electromagnetic radiation falling on each individual surface in (sic) intentionally reflected, and concentrated into as a small return beam as possible being substantially convergent."

According, Applicant's respectfully submit claims 16, 22 and 34 distinguish over the cited references, and are allowable.

In light of the foregoing remarks, this application should be in consideration for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #101709.55374US).

Respectfully submitted,



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